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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,340

09/13/2005

Takayuki Abe

114/75034

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23432 7590 04/24/2008
COOPER & DUNHAM, LLP
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

CWERN, JONATHAN

ART UNIT

PAPER NUMBER

3737

MAIL DATE

DELIVERY MODE

04/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,340	Applicant(s) ABE ET AL.	
	Examiner Jonathan G. Cwern	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-3 and 5-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/4/08 has been entered.

This application is in condition for allowance except for the following formal matters:

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains improper language such as "means for extracting the time phase evaluation values". In addition,

the abstract is poorly worded, and contains grammar problems such as "measurement data of arterial phase" and "after imaging a plurality of time phases including the arterial phase and its image can be displayed in dynamic MRA measurement employing a contrast medium". These are just two examples; the abstract should be rewritten to be clear and concise. Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 1-3 and 5-23 are objected to because of the following informalities:

In claims 1, 21, and 22 some of the language is not consistent throughout the claims, and can be confusing. For example, in claim 1, on line 3, the term "at a high frequency" is used, and on line 5 "at a low **repetitive**-frequency" is used. Claim 22 uses similar language to claim 1. However, in claim 21, on line 3, the term "at a high **repetitive**-frequency" is used, and on line 4, the term "low frequency measurement areas" is used. This also creates a lack of antecedent basis problem in claim 21 for later uses of "said low repetitive-frequency areas". It is not clear which terminology applicant prefers, however the terms should be consistent throughout the claims. For example, only use "high repetitive-frequency" and "low repetitive-frequency" as opposed to "high frequency" or "low frequency".

Also in claim 1, line 15, and claims 16, 17, and 21, the term "said measurement areas" is confusing because it is unclear which measurement areas are being referred to, the low repetitive frequency, high repetitive frequency, or both.

In claims 2 and 3, "said image reconstruction set" lacks antecedent basis.

In claim 5 “the measurement sequence” lacks antecedent basis. Earlier claims now refer to “the measurement **order**”. Also in claim 5, it is not clear which “measurement area” is being referred to.

In claim 6, “said measurement areas” is unclear as to which “measurement area” is being referred to. As it depends from independent claim 22, it appears that it should include the amended portion of claim 22 which includes "said measurements **of the high repetitive-frequency measurement area**".

In claims 11 and 12, there is a lack of antecedent basis for the plural of the term “time evaluation value”. It appears from language in previous claims that only one time evaluation value is obtained.

In claim 15, the term “a measurement sequence” should remain consistent with earlier language, and if referring to the same sequence from the earlier claims, this should be changed to “**the measurement order**”.

In claim 18, “said subject” lacks antecedent basis, and “the artery” lacks antecedent basis.

In claim 20, “said imaging processing” lacks antecedent basis.

In claims 22, the second occurrence of "a desired time phase" should be referred to as "said desired time phase".

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm’r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Cwern whose telephone number is (571)270-1560. The examiner can normally be reached on Monday through Friday 9:30AM - 6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jonathan G Cwern/
Examiner, Art Unit 3737

/Ruth S. Smith/
Primary Examiner, Art Unit 3737